IN THE CLAIMS

1. (Previously Presented) A method for registering a mobile object with a foreign network, comprising:

moving a mobile object from a home network to a foreign network in response to unavailable resources at the home network, the mobile object being computer language code operable to be executed by or executed on the home or foreign networks;

executing the mobile object on a first virtual machine at a first router on the foreign network;

generating a care-of-name for the mobile object at a foreign object agent located on the foreign network;

communicating the care-of-name to a home object agent located on the home network; and

generating a mobility binding for the mobile object at the home object agent, the mobility binding including the care-of-name.

2. (Original) The method of Claim 1, further comprising providing an object name associated with the mobile object to the foreign object agent to create the care-of-name.

3. (Original) The method of Claim 1, wherein the care-of-name comprises an object name associated with the mobile object and an extension name to uniquely identify the mobile object on the foreign network.

4. (Original) The method of Claim 1, further comprising the home object agent operable to maintain network location information for the mobile object.

5. (Original) The method of Claim 1, further comprising:

discovering the foreign object agent on the foreign network; and

receiving an address associated with the foreign object agent at the mobile object.

6. (Original) The method of Claim 1, further comprising locating the mobile object on the foreign network by using the care-of-name associated with the mobility binding.

7. (Original) The method of Claim 1, further comprising determining if the mobile object is authorized to negotiate with the foreign object agent based on object credentials associated with the mobile object.

8. (Original) The method of Claim 1, further comprising:

determining if the mobile object is authorized to negotiate with the foreign object agent based on object credentials associated with the mobile object; and

providing authorization for the foreign object agent to communicate with the home object agent based on agent credentials associated with the foreign object agent if the mobile object is authorized to negotiate with the foreign object agent.

9. (Original) The method of Claim 1, further comprising:

determining if the mobile object is authorized to negotiate with the foreign object agent based on object credentials associated with the mobile object;

providing authorization for the foreign object agent to communicate with the home object agent based on agent credentials associated with the foreign object agent if the mobile object is authorized to negotiate with the foreign object agent; and

authenticating the object credentials at the home object agent to create the mobility binding for the mobile object if the foreign object agent receives authorization to communicate with the home object agent.

10. (Original) The method of Claim 1, further comprising:

copying the mobile object to create a duplicate mobile object on a second virtual machine at a second router located on the foreign network; and

creating a duplicate mobility binding at the home agent for the duplicate mobile object by obtaining a duplicate care-of-name from the foreign object agent.

11. (Original) The method of Claim 1, further comprising:

moving a portion of the mobile object to a second virtual machine at a second router located on the foreign network; and

creating a secondary mobility binding at the first router for the portion of the mobile object by obtaining a secondary care-of-name from the foreign object agent.

12. (Previously Presented) A method for registering a mobile object with a foreign network, comprising:

moving a mobile object from a home network to a foreign network in response to unavailable resources at the home network, the mobile object being computer language code operable to be executed by or executed on the home or foreign networks;

executing the mobile object on a virtual machine at a router on the foreign network;

generating a care-of-name for the mobile object at a foreign object agent located on the foreign network;

communicating the care-of-name to a home object agent located on the home network;

generating a mobility binding for the mobile object at the home object agent, the mobility binding including the care-of-name; and

locating the mobile object on the foreign network by using the care-of-name associated with the mobility binding.

13. (Original) The method of Claim 12, wherein the care-of-name comprises an object name associated with the mobile object and an extension name to uniquely identify the mobile object on the foreign network.

14. (Original) The method of Claim 12, further comprising:

generating a care-of-address associated with the care-of-name for the mobile object at the foreign object agent; and

establishing a tunnel between the home object agent and the mobile object by using the care-of-address as an endpoint of the tunnel.

15. (Original) The method of Claim 14, wherein the care-of-address comprises an Internet Protocol address.

16. (Original) The method of Claim 12, further comprising the home object agent operable to maintain network location information for the mobile object.

17. (Previously Presented) A router comprising a virtual machine configured to host a mobile object, the mobile object operable to:

move from a home network to a foreign network in response to unavailable resources at the home network;

negotiate with a foreign object agent located on the foreign network for a care-of-name; and

obtain a mobility binding from a home object agent located on the home network by using the care-of-name;

wherein the mobile object is computer language code operable to be executed by or executed on the home or foreign networks.

18. (Original) The router of Claim 17, further comprising the mobile object operable to provide an object name associated with the mobile object to the foreign object agent.

19. (Original) The router of Claim 17, wherein the care-of-name comprises an object name associated with the mobile object and an extension name that uniquely identifies the mobile object on the foreign network.

20. (Original) The router of Claim 17, further comprising the home object agent operable to:

host the mobile object on the home network; and

maintain network location information for the mobile object.

21. (Original) The router of Claim 17, further comprising the mobile object operable to:

discover the foreign object agent on the foreign network through an agent solicitation message; and

receive an address associated with the foreign object agent.

22. The router of Claim 17, further comprising an agent virtual machine configured to host the foreign object agent.

23. (Original) The router of Claim 17, further comprising the mobile object operable to:

create a duplicate mobile object operable to be hosted on a duplicate virtual machine at a duplicate router on the foreign network; and

obtain a duplicate mobility binding from the home object agent by receiving a duplicate care-of-name from the foreign object agent.

24. (Original) The router of Claim 17, further comprising the mobile object operable to:

move a portion of the mobile object to a duplicate virtual machine at a duplicate router on the foreign network; and

obtain a secondary mobility binding at the router for the portion of the mobile object by obtaining a secondary care-of-name from the foreign object agent.

25. (Original) The router of Claim 17, further comprising:

the mobile object operable to send object credentials to the foreign object agent to obtain authorization to negotiate with the foreign object agent; and

the mobile object obtaining the mobility binding if the home object agent provides authorization for the foreign object agent to communicate with the home object agent and authenticates object credentials associated with the mobile object.

26. (Previously Presented) Logic encoded in media for registering a mobile object with a foreign network, the logic operable to perform the following steps:

move a mobile object from a home network to a foreign network in response to unavailable resources at the home network, the mobile object being computer language code operable to be executed by or executed on the home or foreign networks;

executing the mobile object on a first virtual machine at a first router on the foreign network;

generating a care-of-name for the mobile object at a foreign object agent located on the foreign network;

sending the care-of-name to a home object agent located on the home network; and

generating a mobility binding for the mobile object at the home object agent, the mobility binding including the care-of-name.

27. (Original) The logic of Claim 26, further comprising providing an object name associated with the mobile object to the foreign object agent to create the care-of-name.

28. (Original) The logic of Claim 26, wherein the care-of-name comprises an object name associated with the mobile object and an extension name that uniquely identify the mobile object on the foreign network.

29. (Original) The logic of Claim 26, further comprising the home object agent operable to maintain network location information for the mobile object.

30. (Original) The logic of Claim 26, further comprising:

discovering the foreign object agent on the foreign network; and

receiving an address associated with the foreign object agent at the mobile object.

31. (Original) The logic of Claim 26, further comprising determining if the mobile object is authorized to negotiate with the foreign object agent based on object credentials associated with the mobile object.

32. (Original) The logic of Claim 26, further comprising:

determining if the mobile object is authorized to negotiate with the foreign object agent based on object credentials associated with the mobile object; and

providing authorization for the foreign object agent to communicate with the home object agent based on agent credentials associated with the foreign object agent if the mobile object is authorized to negotiate with the foreign object agent.

33. (Original) The logic of Claim 26, further comprising:

determining if the mobile object is authorized to negotiate with the foreign object agent based on object credentials associated with the mobile object;

providing authorization for the foreign object agent to communicate with the home object agent based on agent credentials associated with the foreign object agent if the mobile object is authorized to negotiate with the foreign object agent; and

authenticating the object credentials at the home object agent to create the mobility binding for the mobile object if the foreign object agent receives authorization to communicate with the home object agent.

34. (Original) The logic of Claim 26, further comprising:

copying the mobile object to create a duplicate mobile object on a second virtual machine at a second router located on the foreign network; and

creating a duplicate mobility binding at the home agent for the duplicate mobile object by obtaining a duplicate care-of-name from the foreign object agent.

35. (Original) The logic of Claim 26, further comprising:

moving a portion of the mobile object to a second virtual machine at a second router located on the foreign network; and

creating a secondary mobility binding at the first router for the portion of the mobile object by obtaining a secondary care-of-name from the foreign object agent.

36. (Previously Presented) An apparatus for registering a mobile object with a foreign network, comprising:

means for moving a mobile object from a home network to a foreign network in response to unavailable resources at the home network, the mobile object being computer language code operable to be executed by or executed on the home or foreign networks;

means for executing the mobile object on a virtual machine at a router on the foreign network;

means for generating a care-of-name for the mobile object at a foreign object agent located on the foreign network;

means for communicating the care-of-name to a home object agent located on the home network; and

means for generating a mobility binding at the home object agent for the mobile object, the mobility binding including the care-of-name.

37. (Original) The apparatus of Claim 36, wherein the care-of-name comprises an object name associated with the mobile object and an extension name that uniquely identifies the mobile object on the foreign network.

38. (Original) The apparatus of Claim 36, further comprising means for locating the mobile object on the foreign network by using the care-of-name associated with the mobility binding.